

## REMARKS

Independent claims 1 and 12 have been amended. No new matter has been added. Support for the amended claims may be found in Figure 2 and associated discussion in the specification.

In the Final Office Action mailed on March 21, 2005, the Examiner rejected claims 1, 10, 12, and 17 under 35 USC 112, first paragraph, as failing to comply with the written description requirement because these claims set forth “a Butler matrix.” Pursuant to the aforementioned claim amendments, Applicants respectfully request that the Examiner’s rejections of claims 1, 10, 12, and 17 under 35 USC 112, first paragraph, be withdrawn.

In the Final Office Action, the Examiner rejected claims 1-5 and 7-11 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ward (U.S. Patent No. 6,104,930) in view of Lopes (U.S. Patent No. 6,453,176). The Examiner rejected claim 6 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ward in view of Lopes and further in view of Feuerstein (U.S. Patent No. 6,141,565). The Examiner’s rejections are respectfully traversed.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Ward describes a frequency allocation method for allocating carrier frequencies to a plurality of fixed beams in a cellular radio base transceiver station. However, Ward does not describe or suggest a controller that generates a control signal to a switch matrix for coupling or uncoupling an amplifier to at least one radio to modify at least one angular extent of transmission associated with the radio, as set forth in independent claim 1. The Examiner relies on Lopes to describe a Butler matrix and Feuerstein to describe calculating thresholds. These secondary references, however, fail to remedy the fundamental deficiencies of Ward.

Thus, Applicants respectfully submit that the present invention is not obvious in view of Ward, Lopes, or Feuerstein, either alone or in combination. Applicants request that the Examiner's rejections of claims 1-11 under 35 U.S.C. 103(a) be withdrawn.

The Examiner rejected claims 12-17 under 35 U.S.C. 103(a) as allegedly being unpatentable over Smith (U.S. Patent No. 5,021,801) in view of Lopes. The Examiner's rejections are respectfully traversed.


Smith describes an antenna switching system that switches base station transmitters to sectors that have more mobile traffic than they can handle, thereby increasing the number of frequencies in the overloaded sector. However, Smith fails to describe or suggest switching equipment between portions of a communication system using a switch matrix to modify at least one angular extent of the portions served by the equipment to meet the capacity demands of the portions, as set forth in independent claim 12. The Examiner relies on Lopes to describe a Butler matrix. However, Lopes fails to remedy the fundamental deficiencies of Smith. Thus, Applicants respectfully submit that the present invention is not obvious in view of Smith or Lopes, either alone or in combination. Applicants request that the Examiner's rejections of claims 12-17 under 35 U.S.C. 103(a) be withdrawn.

It is believed that no fee is due; however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason, the Commissioner is authorized to deduct said fees from Williams, Morgan & Amerson's P.C. Deposit Account 50-0786/2100.019800.

The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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Mark W. Sincell, Ph.D.  
Registration No. 52,226  
WILLIAMS, MORGAN & AMERSON  
10333 Richmond Avenue, Suite 1100  
Houston, TX 77042  
(713) 934-7000  
(713) 934-7011 (facsimile)

AGENT FOR APPLICANTS